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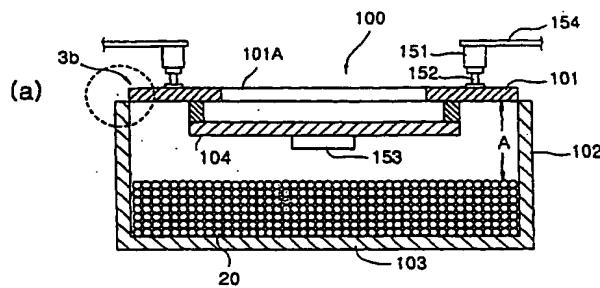
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(54) Source for thermal physical vapour deposition of organic electroluminescent layers

(57) The present invention disclosed the deposition source installed in a chamber, heated by applied electric power to transfer heat to a vapor deposition material received therein and applying a vaporized deposition material generated therein to a substrate to form deposition organic electroluminescent layers onto the substrate, and comprising a vessel consisted of a top plate on which a vapor efflux aperture is formed, a side wall, and a bottom wall; a heating means for supplying heat to the deposition material received in the vessel, the heating means being capable of moving vertically; and a means

for moving the heating means (or the bottom wall), the moving means (or the bottom wall) being operated in response to the signal of a sensing means on varied distances between the heating means and the surface of said deposition material. Thus, the heating means is moved downward (or the bottom wall) is moved upward by the moving means to maintain the distance between the heating means (or the substrate to be coated) and the surface of the deposition material at an initially-set value when the thickness of the deposition material is decreased.

FIG. 3





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Application Number
EP 03 01 6305

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Place of search	Date of completion of the search	Examiner	
Munich	6 April 2004	Thanos, I	
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Place of search	Date of completion of the search	Examiner	
Munich	6 April 2004	Thanos, I	
CATEGORY OF CITED DOCUMENTS		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	
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**CLAIMS INCURRING FEES**

The present European patent application comprised at the time of filing more than ten claims.

Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims and for those claims for which claims fees have been paid, namely claim(s):

No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims.

LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

see sheet B

All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.

As all searchable claims could be searched without effort justifying an additional fee, the Search Division did not invite payment of any additional fee.

Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, namely claims:

None of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims, namely claims:



The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

1. claims: 1-8

This invention is directed to a system comprising a vapour deposition chamber, a source material for depositing an electroluminescent coating by vapour deposition, a vessel heated by a suitable heating means, sensor means to provide information as to the distance between the heating means and the surface of the deposition material, wherein the special technical feature is considered to reside in the regulation of the temperature of the surface of the heated source material by controlling the distance between the said heating means and the surface of the said source material.

2. claims: 9-17

This invention is directed to a system comprising a vapour deposition chamber, a source material for depositing an electroluminescent coating by vapour deposition, a vessel heated by a suitable heating means, sensor means to provide information as to the distance between the heating means and the surface of the deposition material, wherein the special technical feature is considered to reside in the regulation of the temperature of the surface of the heated source material by controlling the mode by which several portions of the heating means are powered.

3. claims: 18-23

This invention is basically directed to a system comprising a vapour deposition chamber, a source material for depositing an electroluminescent coating by vapour deposition, a vessel heated by a suitable heating means, wherein the special technical feature is considered to reside in the dimensions of the opening provided in the vessel comprising the source material relative to the lateral dimensions of the substrate on to which the electroluminescent coating is to be applied and preferably in conjunction with means adapted to horizontally move the vessel comprising the source material.

ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.

EP 03 01 6305

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

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